



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

m1

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/458,077	12/10/1999	NARIAKI SHIMOE	2038-230	8402
22429	7590	01/15/2004	EXAMINER	
LOWE HAUPTMAN GILMAN AND BERNER, LLP			KIDWELL, MICHELE M	
1700 DIAGONAL ROAD				
SUITE 300 /310				
ALEXANDRIA, VA 22314			ART UNIT 3761 PAPER NUMBER 23	
DATE MAILED: 01/15/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/458,077	SHIMOE ET AL.
	Examiner	Art Unit
	Michele Kidwell	3761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 26 September 2003.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 6-8, 10 and 12-27 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 6-8, 10 and 12-27 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. §§ 119 and 120

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) The translation of the foreign language provisional application has been received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ .
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. .	6) <input type="checkbox"/> Other: _____ .

## DETAILED ACTION

### ***Response to Arguments***

Applicant's arguments with respect to claims 6 – 8, 10 and 12 – 23 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6 – 8, 10, 13 – 17, 19 – 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pigneul et al. (US 4,790,838) and further in view of Jones (US 3,749,627).

With reference to claim 6, Pigneul et al. (hereinafter "Pigneul") discloses an absorbent article comprising a liquid permeable topsheet (10) and a liquid absorbent core having an upper surface covered by the topsheet and a lower surface, the core further having indented regions arranged along two lines extending longitudinally along transversely opposite sides of the core, the lines being spaced apart from each other by a distance gradually increasing from a minimum at a longitudinally middle point thereof to a maximum at longitudinally opposite ends thereof, the lines longitudinally dividing the core into a central region confined between the lines and two side regions each

Art Unit: 3761

located between one of the lines and the respective one of the transversely opposite sides of the core as set forth in col. 4, lines 3 – 7 and figure 1.

The difference between Pigneul and claim 6 is the provision that the core comprise a plurality of indentations arranged along the lines, each of the indentations having side walls extending from an opening formed on the upper surface toward the lower surface and ending at a bottom, a portion of the core confined between the bottom and the lower surface defining one of the indented regions and the core containing a density of the fibrous component in the indented regions that is lower than in the central and side regions.

Jones teaches a core comprising a plurality of indentations arranged along lines, each of the indentations having side walls extending from an opening formed on the upper surface toward the lower surface and ending at a bottom, a portion of the core confined between the bottom and the lower surface defining one of the indented regions and the core containing a density of the fibrous component in the indented regions that is lower than in the central and side regions as set forth in col. 5, lines 17 – 40.

It would have been obvious to one of ordinary skill in the art to modify the indentations of Pigneul in light of Jones because the indentations provided by Jones provide reservoirs into which menstrual fluid can surge when unevenly dispersed from the user as taught by Jones in col. 1, lines 67 – 70.

As to claims 7 and 14 – 15 , Pigneul discloses indented regions that continuously extend along the lines as set forth in figure 1.

Art Unit: 3761

With reference to claims 8 and 13, see the rejection of claim 6 and figure 1 of Jones.

As to claims 10 and 26, while Jones does not explicitly teach the use of superabsorptive polymer particles, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the core of Jones with superabsorbent material since it is well known in the art that superabsorbent material reduces the bulk of absorbent articles while providing increased absorbency and efficiency. Jones teaches indented regions that are devoid of all absorbent material as set forth in figure 3.

Regarding claims 16 – 17 and 20 – 21, the examiner contends that the claimed limitations are obvious matters of design choice that do not patentably distinguish the claimed invention from the prior art.

As to claim 19, Pigneul discloses a topsheet spanning over the openings of the indentations as set forth in figure 2.

With respect to claims 22 – 23 and 27, Pigneul discloses a central and side region having substantially the same thickness and a backsheet as set forth in figure 2. Likewise, Jones discloses such in figure 4.

Regarding claims 24 – 25, Jones teaches a core made of a fibrous material as set forth in col. 3, lines 37 – 39.

Claims 12 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pigneul et al. in view of Jones and further in view of Thompson (US 3,929,135).

The difference between Pigneul in view of Jones and claim 12 is the provision that the side walls decrease from the opening toward the bottom.

Thompson teaches a side wall that decreases from the opening toward the bottom.

It would have been obvious to one of ordinary skill in the art to modify the openings of Jones to provide tapered openings because the tapered openings effectively inhibit the reverse flow of fluids from the absorbent element as taught by Thompson in col. 2, lines 38 – 42.

As to claim 18, Thompson teaches the invention as claimed. The examiner contends that two capillaries provided next to each other with the first section illustrated as the portion of the sheet at the right of figure 4, the second section being the left section of the adjacent capillary (not shown) and the third section being the section illustrated by (22) in figure 4.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**.  
See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

Art Unit: 3761

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michele Kidwell whose telephone number is 703-305-2941. The examiner can normally be reached on Monday - Friday, 7:30am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 703-308-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-305-3590.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.

Michele Kidwell  
Michele Kidwell  
January 9, 2004

  
KIM M. LEWIS  
PRIMARY EXAMINER  
*An 3761*